



Dart Aerospace Ltd.  
1270 Aberdeen St  
Hawkesbury, ON  
K6A 1K7  
Canada  
  
Tel (613) 632-5200  
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647.1403  
Job Sheet 203253



Part No: 647.1403      Job Qty: 1 pcs  
Part Name: Upper Cutter Assembly, U-Channel  
  
Part Weight: 0 lbs      Status: New      Priority: Medium  
Job Created: 11/13/19      Job Tracking No:  
Due Date: 12/10/19      Created By: Marie Lajeunesse  
Type: SOLD      Description:  
Note: DWG 647.1400 REV E IPP REV:A NEW ISSUE JFS 13/07/03 VERIFY BY: DD  
Ship Via:

Bill of Materials

Job Routing

| Op No | Operation              | Qty   | Start Date | Due Date | Standard  |         | Workcenter/Supplier   |           | Sign-off           |
|-------|------------------------|-------|------------|----------|-----------|---------|-----------------------|-----------|--------------------|
|       |                        |       |            |          | Setup Hrs | Run Hrs | Workcenter / Supplier | Lead Time |                    |
| 110   | Packaging 1 - Pick Kit | 1 pcs | 12/10/19   |          | 0.00      | 0.00    | Packaging 1 - 1       |           |                    |
|       |                        |       |            |          |           |         | Packaging 1 - 2       |           |                    |
|       |                        |       |            |          |           |         | Packaging 1 - 3       |           |                    |
|       |                        |       |            |          |           |         | Packaging 1 - 4       |           |                    |
|       |                        |       |            |          |           |         | Packaging 1 - 5       |           |                    |
|       |                        |       |            |          |           |         | Packaging 1 - 6       |           |                    |
|       |                        |       |            |          |           |         | Packaging 1 - 7       |           |                    |
|       |                        |       |            |          |           |         | Packaging 1 - 8       |           |                    |
|       |                        |       |            |          |           |         | Packaging 1 - 9       |           |                    |
|       |                        |       |            |          |           |         | Packaging 1 - 10      |           |                    |
|       |                        |       |            |          |           |         | Packaging 1 - 11      |           |                    |
|       |                        |       |            |          |           |         | Packaging 1 - 12      |           |                    |
|       |                        |       |            |          |           |         | Packaging 1 - 13      |           |                    |
|       |                        |       |            |          |           |         | Packaging 1 - 14      |           |                    |
|       |                        |       |            |          |           |         | Packaging 1 - 15      |           |                    |
|       |                        |       |            |          |           |         | Packaging 1 - 16      |           |                    |
|       |                        |       |            |          |           |         | Packaging 1 - 17      |           |                    |
|       |                        |       |            |          |           |         | Packaging 1 - 18      |           |                    |
|       |                        |       |            |          |           |         | Packaging 1 - 19      |           |                    |
|       |                        |       |            |          |           |         | Packaging 1 - 20      |           |                    |
|       |                        |       |            |          |           |         | Packaging 1 - 21      |           |                    |
|       |                        |       |            |          |           |         | Packaging 1 - 22      |           | DAS 41 NOV 18 2019 |
|       |                        |       |            |          |           |         | Packaging 1 - 23      |           | 3-89               |
|       |                        |       |            |          |           |         | Packaging 1 - 24      |           |                    |
|       |                        |       |            |          |           |         | Packaging 1 - 25      |           |                    |
|       |                        |       |            |          |           |         | Packaging 1 - 26      |           |                    |
|       |                        |       |            |          |           |         | Packaging 1 - 27      |           |                    |
|       |                        |       |            |          |           |         | Packaging 1 - 28      |           |                    |
|       |                        |       |            |          |           |         | Packaging 1 - 29      |           |                    |
|       |                        |       |            |          |           |         | Packaging 1 - 30      |           |                    |
|       |                        |       |            |          |           |         | Packaging 1 - 31      |           |                    |



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Container No: S232569



Part: 647.1403  
Job No: 203253  
Serial No/Batch: S232569  
Revision: E  
Inspector:  
Exp Date:  
Instructions: Various STC's

Date: 11/18/19

|                                 |       |          |           |                        |                |
|---------------------------------|-------|----------|-----------|------------------------|----------------|
| 120 Small Fab - 2 - B4B         | 1 pcs | 12/10/19 | 0.00 0.47 | Packaging 1 - 32       |                |
|                                 |       |          |           | Packaging 1 - 33       |                |
|                                 |       |          |           | Packaging 1 - 34       |                |
|                                 |       |          |           | Packaging 1 - 35       |                |
|                                 |       |          |           | Packaging 1 - 36       |                |
|                                 |       |          |           | Small Fab - 1 - B4B    |                |
|                                 |       |          |           | Small Fab - 2 - B4B    |                |
|                                 |       |          |           | Small Fab - 3 - B4B    |                |
|                                 |       |          |           | Small Fab - 4 - B4B    |                |
|                                 |       |          |           | Small Fab - 5 - B4B    | DAS            |
| 130 QC 5                        | 1 pcs | 12/10/19 | 0.00 0.00 | Small Fab - 6 - B4B    | 41 NOV 18 2019 |
|                                 |       |          |           | Small Fab - 7 - B4B    | 9-89           |
|                                 |       |          |           | Small Fab - 8 - B4B    |                |
|                                 |       |          |           | Small Fab - 9 - B4B    |                |
|                                 |       |          |           | QC 5 - 10              |                |
|                                 |       |          |           | QC 5 - 12              |                |
|                                 |       |          |           | QC 5 - 17              |                |
|                                 |       |          |           | QC 5 - 18              |                |
|                                 |       |          |           | QC 5 - 19              |                |
|                                 |       |          |           | QC 5 - 22              |                |
| 140 Packaging 3-1 - Stock - B4B | 1 pcs | 12/10/19 | 0.00 0.00 | QC 5 - 24              |                |
|                                 |       |          |           | QC 5 - 3               |                |
|                                 |       |          |           | QC 5 - 43              |                |
|                                 |       |          |           | QC 5 - 49              |                |
|                                 |       |          |           | QC 5 - 51              |                |
|                                 |       |          |           | QC 5 - 58              |                |
|                                 |       |          |           | QC 5 - 68              |                |
|                                 |       |          |           | QC 5 - 9               |                |
|                                 |       |          |           | QC 5 - 50              |                |
|                                 |       |          |           | QC 5 - 30              | DAS            |
|                                 |       |          |           | QC 5 - 40              | NOV 28 2019 40 |
|                                 |       |          |           | QC 5 - 61              | 9-89           |
|                                 |       |          |           | QC 5 - 81              |                |
|                                 |       |          |           | Packaging 3 - 1 - B4B  |                |
|                                 |       |          |           | Packaging 3 - 2 - B4B  |                |
|                                 |       |          |           | Packaging 3 - 3 - B4B  |                |
|                                 |       |          |           | Packaging 3 - 4 - B4B  | DAS            |
|                                 |       |          |           | Packaging 3 - 5 - B4B  | 74             |
|                                 |       |          |           | Packaging 3 - 6 - B4B  | 9-89           |
|                                 |       |          |           | Packaging 3 - 7 - B4B  | NOV 29 2019    |
|                                 |       |          |           | Packaging 3 - 8 - B4B  |                |
|                                 |       |          |           | Packaging 3 - 9 - B4B  |                |
|                                 |       |          |           | Packaging 3 - 10 - B4B |                |
|                                 |       |          |           | Packaging 3 - 11 - B4B |                |
|                                 |       |          |           | Packaging 3 - 12 - B4B |                |
|                                 |       |          |           | Packaging 3 - 13 - B4B |                |
|                                 |       |          |           | Packaging 3 - 14 - B4B |                |
|                                 |       |          |           | Packaging 3 - 15 - B4B |                |
|                                 |       |          |           | Packaging 3 - 16 - B4B |                |
|                                 |       |          |           | Packaging 3 - 17 - B4B |                |
|                                 |       |          |           | Packaging 3 - 18 - B4B |                |
|                                 |       |          |           | Packaging 3 - 19 - B4B |                |
|                                 |       |          |           | Packaging 3 - 20 - B4B |                |
|                                 |       |          |           | Packaging 3 - 21 - B4B |                |
|                                 |       |          |           | Packaging 3 - 22 - B4B |                |
|                                 |       |          |           | Packaging 3 - 23 - B4B |                |
|                                 |       |          |           | Packaging 3 - 24 - B4B |                |
|                                 |       |          |           | Packaging 3 - 25 - B4B |                |
|                                 |       |          |           | Packaging 3 - 26 - B4B |                |

|                |       |          |           |                        |     |
|----------------|-------|----------|-----------|------------------------|-----|
| 150 QC 21 - SA | 1 pcs | 12/10/19 | 0.00 0.00 | Packaging 3 - 27 - B4B |     |
|                |       |          |           | Packaging 3 - 28 - B4B |     |
|                |       |          |           | Packaging 3 - 29 - B4B |     |
|                |       |          |           | Packaging 3 - 30 - B4B |     |
|                |       |          |           | Packaging 3 - 31 - B4B |     |
|                |       |          |           | Packaging 3 - 32 - B4B |     |
|                |       |          |           | Packaging 3 - 33 - B4B |     |
|                |       |          |           | Packaging 3 - 34 - B4B |     |
|                |       |          |           | Packaging 3 - 35 - B4B |     |
|                |       |          |           | Packaging 3 - 36 - B4B |     |
|                |       |          |           | QC 21 - SA - 21        |     |
|                |       |          |           | QC 21 - SA - 70        | DAS |

NOV 29 2019

Part Op 110 - (Pick Kit)  
Descriptions: 120 - (Small Fab) Assemble as per dwg and apply loctite 598 on all faying surfaces per note 2. A/R RTV LOCTITE  
598: 5218075 exp. date: 1/21  
130 - (QC5- Inspect part completeness to step on W/O)  
140 - (Identify as per dwg & Stock Location: \_\_\_\_\_) \*\*\*IDENTIFY AS PER APICAL MPP-120 BY STAMPING THE P# AND REV\*\*\*  
150 - (QC21- Final Inspection - Work Order Release)

| Job BOM       |                                 |              |                            |           |
|---------------|---------------------------------|--------------|----------------------------|-----------|
| Part / Item   | Component Name                  | Quantity     | Operation                  | Container |
| 646.9702      | Cutter Sub Assembly (U Channel) | 1 pcs (1 ea) | 110-Packaging 1 - Pick Kit | 5161759   |
| 647.1510      | Upper Deflector                 | 1 pcs (1 ea) | 110-Packaging 1 - Pick Kit | 5142492   |
| MS21042L08    | Nut                             | 3 Ea (3 ea)  | 110-Packaging 1 - Pick Kit | 5205000   |
| MS27039-08-19 | Screw                           | 3 Ea (3 ea)  | 110-Packaging 1 - Pick Kit | 5204996   |
| NAS1149FN832P | Washer (AN960-8 )               | 6 Ea (6 ea)  | 110-Packaging 1 - Pick Kit | 5202676   |

| Job Allocations            |                |          |           |           |
|----------------------------|----------------|----------|-----------|-----------|
| Operation                  | Component Part | Required | Inventory | Allocated |
| 110-Packaging 1 - Pick Kit | 646.9702       | 1        | 3         | 0         |
|                            | 647.1510       | 1        | 1         | 0         |
|                            | MS21042L08     | 3        | 939       | 0         |
|                            | MS27039-08-19  | 3        | 1,010     | 0         |
|                            | NAS1149FN832P  | 6        | 2,082     | 0         |

| Part Specifications                |  |  |  |  |
|------------------------------------|--|--|--|--|
| Specifications could not be found. |  |  |  |  |

Date:

Date:



## **WORK ORDER NON-CONFORMANCE / ROUTE UPDATE**

NCR No.

Route update only

|                                  |             |                                                                                                                               |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |  |  |  |  |  |
|----------------------------------|-------------|-------------------------------------------------------------------------------------------------------------------------------|--|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|--|--|
| Job: _____<br>Part No. _____     |             | <b>DISPOSITION</b><br>Rework <input type="checkbox"/><br>Scrap <input type="checkbox"/><br>Use-as-is <input type="checkbox"/> |  | <b>DEPARTMENT/PROCESS</b><br>Skid-tube <input type="checkbox"/> Cross tube <input type="checkbox"/> Eng. (Non-AW) <input type="checkbox"/><br>Machining <input type="checkbox"/> Small Fab <input type="checkbox"/> Prod. Eng. Coord. <input type="checkbox"/><br>Large Fab <input type="checkbox"/> Finishing <input type="checkbox"/> Rec/Store/Packaging <input type="checkbox"/><br>Engineering <input type="checkbox"/><br>Water Jet <input type="checkbox"/><br>Supplier <input type="checkbox"/><br>Quality <input type="checkbox"/> |  |  |  |  |  |
| Date :                           | Sequence #: | QTY Affected :                                                                                                                |  | MRB (QSI042)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |  |  |  |  |  |
| Description Work Order Deviation |             |                                                                                                                               |  | Disposition                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |  |  |  |  |  |
|                                  |             |                                                                                                                               |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |  |  |  |  |  |
|                                  |             |                                                                                                                               |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |  |  |  |  |  |
|                                  |             |                                                                                                                               |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |  |  |  |  |  |
| Completed By                     |             |                                                                                                                               |  | Lead hand / Supervisor                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |  |  |  |  |  |
|                                  |             |                                                                                                                               |  | QC / QA Coordinator                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |  |  |  |  |

|                                                                                                                                                                                                                                                                                                                                                                                     |                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                   |  |  |  |  |  |  |  |  |                 |               |                  |                  |         |                       |               |                   |          |           |                 |         |        |                      |      |        |                              |                                 |                    |                   |               |             |                 |         |            |              |                |  |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|--|--|--|--|--|--|--|--|-----------------|---------------|------------------|------------------|---------|-----------------------|---------------|-------------------|----------|-----------|-----------------|---------|--------|----------------------|------|--------|------------------------------|---------------------------------|--------------------|-------------------|---------------|-------------|-----------------|---------|------------|--------------|----------------|--|
| <b>Root Cause</b><br>Operator <input type="checkbox"/><br>Manufacturing Process <input type="checkbox"/><br>Equip/Tooling <input type="checkbox"/><br>Handling/Preservation <input type="checkbox"/><br>Material <input type="checkbox"/><br>Product Improvement <input type="checkbox"/><br>Process Improvement <input type="checkbox"/><br>Human Factors <input type="checkbox"/> |                                 | <b>FAULT CATEGORY</b><br><table border="1"> <tr> <td>Pressure/Forced</td> <td>Contamination</td> <td>Power Loss/Surge</td> <td>Positioned Wrong</td> </tr> <tr> <td>Bending</td> <td>Misaligned/off center</td> <td>Folio/Program</td> <td>Outside Tolerance</td> </tr> <tr> <td>Crushing</td> <td>BOM/Route</td> <td>Grain Direction</td> <td>Drawing</td> </tr> <tr> <td>Cracks</td> <td>Broken/Damage/Defect</td> <td>Weld</td> <td>Finish</td> </tr> <tr> <td>Crimp/Kink/Ripple/Wave/Twist</td> <td>Incomplete/Unclear Instructions</td> <td>Wrong Stock Pulled</td> <td>Part Lost/Missing</td> </tr> <tr> <td>Marks/Chatter</td> <td>Drill Holes</td> <td>Out of Sequence</td> <td>Misread</td> </tr> <tr> <td>Mislabeled</td> <td>Fit/Function</td> <td>Off-set/Set-up</td> <td></td> </tr> </table> |                   |  |  |  |  |  |  |  |  | Pressure/Forced | Contamination | Power Loss/Surge | Positioned Wrong | Bending | Misaligned/off center | Folio/Program | Outside Tolerance | Crushing | BOM/Route | Grain Direction | Drawing | Cracks | Broken/Damage/Defect | Weld | Finish | Crimp/Kink/Ripple/Wave/Twist | Incomplete/Unclear Instructions | Wrong Stock Pulled | Part Lost/Missing | Marks/Chatter | Drill Holes | Out of Sequence | Misread | Mislabeled | Fit/Function | Off-set/Set-up |  |
| Pressure/Forced                                                                                                                                                                                                                                                                                                                                                                     | Contamination                   | Power Loss/Surge                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Positioned Wrong  |  |  |  |  |  |  |  |  |                 |               |                  |                  |         |                       |               |                   |          |           |                 |         |        |                      |      |        |                              |                                 |                    |                   |               |             |                 |         |            |              |                |  |
| Bending                                                                                                                                                                                                                                                                                                                                                                             | Misaligned/off center           | Folio/Program                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Outside Tolerance |  |  |  |  |  |  |  |  |                 |               |                  |                  |         |                       |               |                   |          |           |                 |         |        |                      |      |        |                              |                                 |                    |                   |               |             |                 |         |            |              |                |  |
| Crushing                                                                                                                                                                                                                                                                                                                                                                            | BOM/Route                       | Grain Direction                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Drawing           |  |  |  |  |  |  |  |  |                 |               |                  |                  |         |                       |               |                   |          |           |                 |         |        |                      |      |        |                              |                                 |                    |                   |               |             |                 |         |            |              |                |  |
| Cracks                                                                                                                                                                                                                                                                                                                                                                              | Broken/Damage/Defect            | Weld                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Finish            |  |  |  |  |  |  |  |  |                 |               |                  |                  |         |                       |               |                   |          |           |                 |         |        |                      |      |        |                              |                                 |                    |                   |               |             |                 |         |            |              |                |  |
| Crimp/Kink/Ripple/Wave/Twist                                                                                                                                                                                                                                                                                                                                                        | Incomplete/Unclear Instructions | Wrong Stock Pulled                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Part Lost/Missing |  |  |  |  |  |  |  |  |                 |               |                  |                  |         |                       |               |                   |          |           |                 |         |        |                      |      |        |                              |                                 |                    |                   |               |             |                 |         |            |              |                |  |
| Marks/Chatter                                                                                                                                                                                                                                                                                                                                                                       | Drill Holes                     | Out of Sequence                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Misread           |  |  |  |  |  |  |  |  |                 |               |                  |                  |         |                       |               |                   |          |           |                 |         |        |                      |      |        |                              |                                 |                    |                   |               |             |                 |         |            |              |                |  |
| Mislabeled                                                                                                                                                                                                                                                                                                                                                                          | Fit/Function                    | Off-set/Set-up                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                   |  |  |  |  |  |  |  |  |                 |               |                  |                  |         |                       |               |                   |          |           |                 |         |        |                      |      |        |                              |                                 |                    |                   |               |             |                 |         |            |              |                |  |
|                                                                                                                                                                                                                                                                                                                                                                                     |                                 | Other/Details:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                   |  |  |  |  |  |  |  |  |                 |               |                  |                  |         |                       |               |                   |          |           |                 |         |        |                      |      |        |                              |                                 |                    |                   |               |             |                 |         |            |              |                |  |
|                                                                                                                                                                                                                                                                                                                                                                                     |                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                   |  |  |  |  |  |  |  |  |                 |               |                  |                  |         |                       |               |                   |          |           |                 |         |        |                      |      |        |                              |                                 |                    |                   |               |             |                 |         |            |              |                |  |